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Substitute for form 1449A/PTO <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets as necessary)				<b>Complete If Known</b>		
				Application Number	10/772,756	
Sheet		1	of	2	Filing Date	February 5, 2004
					First Named Inventor	Nathaniel S. Fox
					Group Art Unit	3673 31071
					Examiner Name	Unassigned Mayo, T.
					Attorney Docket Number	04017.00071

U.S. PATENT DOCUMENTS						
Examiner Initials *	Cite No. <sup>1</sup>	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear CL. SUB
		Number - Kind Code <sup>2</sup> (if known)				
JLL	1	US-	5,978,749	11/02/1999	Likins, Jr. et al.	702 / 158
	2	US-	5,622,453	04/22/1997	Finley et al.	405 / 240
	3	US-	5,608,169	04/04/1997	Fujioka et al.	73 / 803
	4	US-	5,423,633	06/13/1995	Verstraeten	405 / 228
	5	US-	5,249,892	10/05/1993	Fox et al.	405 / 233
	6	US-	5,066,168	11/19/1991	Holdeman	405 / 249
	7	US-	4,966,498	10/30/1990	Blum	405 / 233
	8	US-	4,770,256	09/13/1988	Lipsker et al.	175 / 57
	9	US-	4,738,568	04/19/1988	Steding	405 / 241
	10	US-	4,730,954	03/15/1988	Silwinski et al.	405 / 240
	11	US-	4,657,441	04/14/1987	Horvath	405 / 254
	12	US-	4,637,758	01/20/1987	Tamaki et al.	405 / 248
	13	US-	4,605,339	08/12/1986	Bullivant	405 / 237
	14	US-	4,314,615	02/09/1982	Sodder, Jr. et al.	175 / 94
	15	US-	4,165,198	08/21/1979	Farmer	405 / 243
	16	US-	3,869,003	04/04/1975	Yamada et al.	175 / 171
	17	US-	3,685,302	08/22/1972	Fuller	405 / 237
	18	US-	3,638,433	02/01/1972	Sherard	405 / 50

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
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JLL	19	Handbook of Concrete Engineering, Second Edition, edited by Mark Fintel, Van Nostrand Reinhold Company, New York, NY, 2 <sup>nd</sup> Ed., Chap. 8, pp. 268-320, 1985	
JLL	20	International Preliminary Examination for PCT/US00/01794 dated July 23, 2001	
JLL	21	International Search Report for PCT/US00/01794 dated June 6, 2000	
JLL	22	International Search Report for PCT/US01/19214 dated November 5, 2001	
JLL	23	J.E. Bowles, Foundation Analysis and Design, 4 <sup>th</sup> Ed., Chap. 6, pp. 288-303	

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<i>[Signature]</i>	24	Lawton, et al., Control of Settlement and Uplift of Structures using Short Aggregate Piers, ASCE National Convention, October 9-13, 1994, pp. 121-132	
<i>[Signature]</i>	25	ENR Engineering News-Record, the Construction Weekly, Shorter Piles Have Deep Impact, July, 1996	

Examiner Signature	<i>[Signature]</i>	Date Considered	03 Aug. 2004
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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